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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,014	06/24/2003	Chuan-Yu Hsu	JCLA9962	5707
7590	04/09/2004		EXAMINER	
J.C. Patents, Inc. Suite 250 4 Venture Irvine, CA 92618			SAWHNEY, HARGOBIND S	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/606,014	HSU ET AL.	
	Examiner	Art Unit	
	Hargobind S Sawhney	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-19 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it includes a legal phrase "comprising" in each of lines 2 and 3. The phrase " comprising should rephrased as – including. The use of legal phrases should be limited to reciting limitations of the claims. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Welch (US Patent No.: 2,194,841).

Regarding claims 1-5, Welch ('841) discloses a light source module (Figure 1) comprising:

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- a reflector – including light output sections 4, 4a, 5, 5a, 6 and 6a (Figure 3, page 2, column 1, lines 42-52);
- the reflector further including at least one protrusion – defined by the light output sections 4 and 4a (Figure 3);
- a lamp 1 disposed in the reflector, and suitable for emitting light being reflected on to the other portions of the reflector via protrusions (Figure 3, page 2, column 1, lines 35-52);
- the lamp being a line source, and including a Cold Cathode Fluorescent Lamp (Figure 3, page 1, column 2, lines 36-43); and
- the protrusion – defined by the light output sections 4 and 4a (Figure 3) being a polygon protrusion covered with reflective layers 4 and 4a (Figure 3, page 2, column 1, lines 44-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Welch (US Patent No.: 2,194,841) in view of Houviez (WO 97/43578).

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Welch ('841) discloses a light source module (Figure 1) comprising a reflector. However, Welch ('841) does not specifically teach the reflector having reflective surface made of Aluminum.

On the other hand, Houviez (WO 97/43578) discloses a light source reflector made of aluminum (Figure 4, English translated abstract).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the reflector of Welch ('841) by providing the reflective surfaces made of aluminum as taught by Houviez (WO 97/43578; English translated abstract) for the benefits of efficiently reflecting light in the predetermined direction.

Allowable Subject Matter

6. Claims 7-19 are allowed.

The prior art of record, including Welch (US Patent No.: 2,194,841), Figueroa (US Patent No.: 5,062,030) and Houviez (WO 97/43578), and does not show or suggest the applicant's invention as claimed. Specifically, the prior art of record does not disclose proper motivation for a light source module comprising a reflector combining:

- a reflector portion including a light output section as recited in claims 7 and 13;

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- the light output portion being a curve F defined as $F = \int dF dS = \int (ax+by+c) dS$ as recited in claims 7 and 13, and wherein:
 - S being a reflective surface adjacent to the light output surface;
 - dF being a differential plane constructing the curve F;
 - dS being a differential plane constructing the constructing the reflective surface S; and
 - (a,b) being normal vector of the differential plane dF.

The combination of the above-indicated equation and computational steps for design of a reflector for a line light source makes this invention unique.

Neither combined nor individual teaching of Welch (US Patent No.: 2,194,841), Figueroa (US Patent No.: 5,062,030) and Houviez (WO 97/43578) teaches the above indicated design method as claimed by the applicant.

Therefore claims 1 and 13 are allowed over prior art.

Claims 8-12 necessarily allowed because of their dependency on the allowed base Claim 7.

Claims 14-19 necessarily allowed because of their dependency on the allowed base Claim 13.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leibig et al. (U.S. Patent No. 6,231,209 B1), Mephram et al. (U.S. Patent No. US Patent No.: 5,253,151)) and Figueroa (US Patent No. 4,499,529

The above-indicated prior arts disclose a light source module comprising some of the claimed features claimed by the applicant.

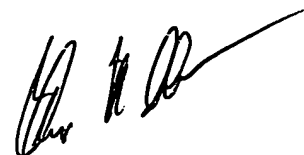
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571-272-2380. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-93067724 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2956

HSS

3/28/2004



THOMAS M. SEMBER
PRIMARY EXAMINER